WHAT IS CLAIMED IS:

1.   A method for defining asset classes in a digital library, comprising:

defining at least one asset class to include at least one attribute;

defining attributes for each asset class to have an attribute object type;

defining the attribute object type to indicate one of a plurality of different data structure formats that are searchable through separate application programs, wherein the attribute object types in one asset class are implemented in different data structure formats;

generating an asset object instance for each asset class; and

generating information in the asset object instance on a file location of attribute objects providing the attributes for the generated asset object instance.

2.   The method of claim 1, wherein generating asset object instances further comprises:

generating attribute information into the asset object instance for at least one attribute object of the asset object instance.

3.   The method of claim 1, wherein one object type comprises a database object and a second object type comprises a text file, wherein one asset class has at least one attribute defined to have a text attribute object and one attribute defined to have a database attribute object.

4.   The method of claim 3, wherein a third object type comprises a multimedia file, wherein one attribute is defined to have an attribute object comprising at least one multimedia file.

5.   The method of claim 1, wherein attributes for an asset class are defined to include an attribute name, attribute value type, and an attribute file location of the attribute object, wherein when generating the asset object instances further comprises:

4   generating values in the generated asset object instance for the attribute name, the

5   attribute value type, and the attribute file location for attribute objects.

1   6.   The method of claim 1, wherein one attribute is defined to include a

2   plurality of sub-attributes, wherein sub-attributes are defined to include a sub-attribute

3   name, a sub-attribute value type, and a sub-attribute file location, wherein generating

4   asset object instances further comprises:

5   generating values in the generated asset object instance for the sub-attribute name,

6   the sub-attribute value type, and the sub-attribute file location for a sub-attribute object.

1   7.   The method of claim 1, wherein one attribute type comprises a

2   relationship attribute indicating a relationship attribute object defining an association of a

3   first and second asset types.

1   8.   The method of claim 7, wherein the relationship attribute includes a

2   relationship location indicating a file location of the relationship attribute object.

1   9.   The method of claim 7, wherein the relationship attribute object comprises

2   a database table, wherein a first column in the database table is for unique identifiers of

3   instances of the first asset type and a second column in the database table is for unique

4   identifiers of instances of the second asset type, wherein a row in the database table

5   identifies one instance of the first asset type identified by the unique identifier in the first

6   column of the row that is associated with one instance of the second asset type identified

7   by the unique identifier in the second column of the row.

1   10.   The method of claim 1, wherein the definition of each attribute for each

2   asset is implemented in at least one computer data structure.

1   11.   The method of claim 10, wherein the definition of each attribute for an

2   asset class is implemented in an Extensible Markup Language (XML) document, wherein

3   each defined attribute for an asset class comprises a tagged element in the XML

4   document and wherein information for each attribute is embedded in at least one tagged

5   attribute of the tagged element for the attribute.

1   12.   The method of claim 11, wherein the definition of the attribute objects for

2   each asset object instance is maintained in tagged elements of an XML file

1   13.   The method of claim 1, wherein the asset classes provide information on a

2   film production, wherein the defined asset classes include a movie asset class, a scene

3   asset class, a background asset class, and a character asset class, wherein the attribute

4   objects provide information on instances of movie, scene, background, and character

5   assets.

1   14.   The method of claim 1, further comprising:

2   defining an additional attribute for one asset class after an instance for the asset

3   class has been generated, wherein defining the additional attribute does not affect

4   instances of the asset class generated before the additional attribute for the asset class

5   was defined.

1   15.   A system for maintaining information, comprising:

2   a digital library;

3   means for defining at least one asset in the digital library class to include at least

4   one attribute;

5   means for defining attributes for each asset class to have an attribute object type;

6   means for defining the attribute object type to indicate one of a plurality of

7   different data structure formats that are searchable through separate application

8 programs, wherein the attribute object types in one asset class are implemented in

9 different data structure formats;

10   means for generating an asset object instance for each asset class; and

11   means for generating information in the asset object instance on a file location of

12 attribute objects providing the attributes for the generated asset object instance.

1   16.   The system of claim 15, wherein the means for generating asset object

2 instances further performs:

3   generating attribute information into the asset object instance for at least one

4 attribute object of the asset object instance.

1   17.   The system of claim 15, wherein one object type comprises a database

2 object and a second object type comprises a text file, wherein one asset class has at least

3 one attribute defined to have a text attribute object and one attribute defined to have a

4 database attribute object.

1   18.   The system of claim 17, wherein a third object type comprises a

2 multimedia file, wherein one attribute is defined to have an attribute object comprising at

3 least one multimedia file.

1   19.   The system of claim 15, wherein one attribute type comprises a

2 relationship attribute indicating a relationship attribute object defining an association of a

3 first and second asset types.

1   20.   The system of claim 15, wherein the relationship attribute includes a

2 relationship location indicating a file location of the relationship attribute object.

1   21.   The system of claim 15, wherein the definition of each attribute for an

2 asset class is implemented in an Extensible Markup Language (XML) document, wherein
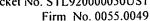
3 each defined attribute for an asset class comprises a tagged element in the XML

4 document and wherein information for each attribute is embedded in at least one tagged

5 attribute of the tagged element for the attribute.

1   22.   The system of claim 15, further comprising:

2   means for defining an additional attribute for one asset class after an instance for

3 the asset class has been generated, wherein the means for defining the additional attribute

4 does not affect instances of the asset class generated before the additional attribute for the

5 asset class was defined.

1   23.   An article of manufacture including code for defining asset classes in a

2 digital library, wherein the code causes operations comprising:

3   defining at least one asset class to include at least one attribute;

4   defining attributes for each asset class to have an attribute object type;

5   defining the attribute object type to indicate one of a plurality of different data

6 structure formats that are searchable through separate application programs, wherein the

7 attribute object types in one asset class are implemented in different data structure

8 formats;

9   generating an asset object instance for each asset class; and

10   generating information in the asset object instance on a file location of attribute

11 objects providing the attributes for the generated asset object instance.

1   24.   The article of manufacture of claim 23, wherein generating asset object

2 instances further comprises:

3   generating attribute information into the asset object instance for at least one

4 attribute object of the asset object instance.

1   25.   The article of manufacture of claim 23, wherein one object type comprises

2 a database object and a second object type comprises a text file, wherein one asset class

3   has at least one attribute defined to have a text attribute object and one attribute defined

4   to have a database attribute object.

1   26.   The article of manufacture of claim 25, wherein a third object type

2   comprises a multimedia file, wherein one attribute is defined to have an attribute object

3   comprising at least one multimedia file.

1   27.   The article of manufacture of claim 23, wherein attributes for an asset

2   class are defined to include an attribute name, attribute value type, and an attribute file

3   location of the attribute object, wherein when generating the asset object instances further

4   comprises:

5   generating values in the generated asset object instance for the attribute name, the

6   attribute value type, and the attribute file location for attribute objects.

1   28.   The article of manufacture of claim 23, wherein one attribute type

2   comprises a relationship attribute indicating a relationship attribute object defining an

3   association of a first and second asset types.

1   29.   The article of manufacture of claim 28, wherein the relationship attribute

2   includes a relationship location indicating a file location of the relationship attribute

3   object.

1   30.   The article of manufacture of claim 23, wherein the definition of each

2   attribute for an asset class is implemented in an Extensible Markup Language (XML)

3   document, wherein each defined attribute for an asset class comprises a tagged element in

4   the XML document and wherein information for each attribute is embedded in at least

5   one tagged attribute of the tagged element for the attribute.

1   31.   The article of manufacture of claim 23, further comprising:

2   defining an additional attribute for one asset class after an instance for the asset

3   class has been generated, wherein defining the additional attribute does not affect

4   instances of the asset class generated before the additional attribute for the asset class

5   was defined.

32.   A computer-readable medium including data structures for maintaining

1   information on asset classes in a digital library, comprising:

2   a definition of at least one asset class including at least one attribute;

3   a definition of attributes for each asset class having an attribute object type;

4   a definition of the attribute object type indicating one of a plurality of different

5   data structure formats that are searchable through separate application programs, wherein

6   the attribute object types in one asset class are implemented in different data structure

7   formats;

8   an asset object instance for each asset class; and

9   information in the asset object instance on a file location of attribute objects

10   providing the attributes for the generated asset object instance.

1   33.   The computer readable medium of claim 32, wherein the asset object

2   instances further comprise:

3   attribute information for at least one attribute object of the asset object instance.

1   34.   The computer readable medium of claim 32, wherein one object type

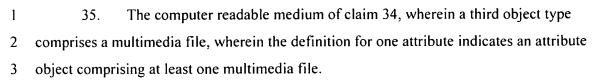2   comprises a database object and a second object type comprises a text file, wherein the

3   definition of one asset class has at least one attribute defined to have a text attribute

4   object and one attribute defined to have a database attribute object.

1   35.   The computer readable medium of claim 34, wherein a third object type

2   comprises a multimedia file, wherein the definition for one attribute indicates an attribute

3   object comprising at least one multimedia file.

1   36.   The computer readable medium of claim 32, wherein the definition of

2   attributes for an asset class include an attribute name, attribute value type, and an

3   attribute file location of the attribute object, wherein the definition of the asset object

4   instances further includes:

5   values for the attribute name, the attribute value type, and the attribute file

6   location for attribute objects.

1   37.   The computer readable medium of claim 32, wherein one defined attribute

2   type comprises a relationship attribute indicating a relationship attribute object defining

3   an association of a first and second asset types.

1   38.   The computer readable medium of claim 37, wherein the relationship

2   attribute includes a relationship location indicating a file location of the relationship

3   attribute object.

1   39.   The computer readable medium of claim 32, wherein the definition of

2   each attribute for an asset class is implemented in an Extensible Markup Language

3   (XML) document, wherein each defined attribute for an asset class comprises a tagged

4   element in the XML document and wherein information for each attribute is embedded in

5   at least one tagged attribute of the tagged element for the attribute.

1   40.   The computer readable medium of claim 32, further comprising:

2   a definition of an additional attribute for one asset class generated after an

3   instance for the asset class was generated, wherein defining the additional attribute does

4   not affect instances of the asset class generated before the additional attribute for the

5   asset class was defined.